

ABSTRACT OF THE DISCLOSURE

5 A data conversion apparatus etc. which inhibits
octet/bit insertion to reduce a data transmission amount
and improve a throughput in a section not requiring
octet/bit insertion during communication based on PPP is
provided. Further, a communication apparatus which
reduces a control packet on a communication line is
provided. When transmitting a data signal from DTE to DTE,
10 octet/bit insertion is performed DTE to a data, and
transmission is made. In a DCE, a data having a PPP frame
configuration and being octet/bit-inserted is converted
into a data having an improved PPP frame configuration and
being not octet/bit inserted. In a gateway (NW), a data
15 having the improved PPP frame configuration and being not
octet/bit inserted is converted into a data having the PPP
frame configuration and being octet/bit inserted. After
the data conversion, the gateway transmits a signal
including the converted data to DTE. In DTE, octet/bit
20 deletion is performed as in the prior art.